# Farm Parity Prices and the War



PRODUCTS FARMERS SELL          PARITY          PRODUCTS FARMERS BUY

### What Does "Parity Price" Mean?

Parity price means a price for the farmer's product which will give it an exchange value, for things the farmer needs to buy, equivalent to that in a specified base period. The base period mostly used as "par" has been the 5 pre-war years, 1909–14.

### Background

The parity-price concept evolved out of the discussion and action on farm relief during the post-war depression of the 1920's. As various plans were brought forward to aid farm prices and income, more and more stress was placed upon the necessity for some definite yardstick.

During those years also, price indexes were developed which made it possible to gage more accurately the economic position of farm products in relation to other things. Using those new statistical tools— price indexes—the parity-price yardstick finally was developed as a unique equalizing mechanism in behalf of agriculture.

### Parity Price as Defined in Legislation

The original definition in the Agricultural Adjustment Act of 1933 declared it as the policy of Congress, among other things, to:

reestablish prices to farmers at a level that will give agricultural commodities a purchasing power, with respect to articles that farmers buy, equivalent to the purchasing power of agricultural commodities in the base period. The base period in the case of all agricultural commodities except tobacco shall be the pre-war period, August 1909–July 1914. In the case of tobacco, the base period shall be the post-war period August 1919–July 1929.

Although this formula has been amended several times since 1933, it has not been changed essentially except that allowances for interest payments per acre on farm indebtedness secured by real estate, and tax payments per acre on farm real estate, have been added to the purchasing-power calculations for all commodities for which the base period is 1909–14; and the base period for Burley and flue-cured tobacco has

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Prepared in the United States Department of Agriculture

been shifted to August 1934–July 1939.

Under the Agricultural Marketing Act of 1937, the Secretary of Agriculture is allowed to consider "the price of feeds, the available supplies of feeds, and other economic conditions which affect market supply and demand," in determining prices for milk and its products where marketing agreements are in effect. Where satisfactory statistics are not available for the earlier base period, the Secretary also is allowed to use "the post-war period August 1919–July 1929, or all that portion thereof for which the purchasing power of such commodities can be satisfactorily determined from available statistics," for the purposes of marketing agreements and orders under the act.

The so-called Steagall Amendment provides that whenever the Secretary finds it necessary to give special encouragement to the production of any commodity, such funds as are available shall be so used as to support prices for such commodities at "not less than 85 per centum of the parity or comparable prices therefor" and that "comparable prices shall be determined and used (whenever) the production or consumption of such commodity has so changed as to result in a price out of line with parity prices for basic commodities."

That is, comparable prices are to be used where parity prices are not now available, as in the case of soybeans, or where parity, as calculated according to the general formula, is clearly out of line with prices of the five basic commodities—corn, cotton, wheat, rice, and tobacco—specified in the Agricultural Adjustment Act of 1938.

The Emergency Price Control Act, approved January 30, 1942, specified as follows with reference to price ceilings on farm products:

No maximum price shall be established or maintained for any agricultural commodity below the highest of any of the following prices, as determined and published by the Secretary of Agriculture: (1) 110 per centum of the parity price for such commodity, adjusted by the Secretary of Agriculture for grade, location, and seasonal differentials, or, in case a comparable price has been determined for such commodity under subsection (b), 110 per centum of such comparable price, adjusted in the same manner, in lieu of 110 per centum of the parity price so adjusted; (2) the market price prevailing for such commodity on October 1, 1941; (3) the market price prevailing for such commodity on December 15, 1941; or (4) the average price for such commodity during the period July 1, 1919, to June 30, 1929.

*How Parity Price is Calculated*

(1) A base price for the period 1909–14 is determined. This is done by averaging the prices reported by farmers, to the Department of Agriculture, for the 60 months beginning August 1909 and ending July 1914. For example, the average price of cotton during this period was 12.4 cents a pound; wheat averaged 88.4 cents a bushel; corn 64.2 cents a bushel.

(2) An index of prices paid, including taxes on real estate and interest paid, is calculated. In this are reckoned the prices of items used in family living and in farm production. The estimated quantity of each commodity used by farmers is used to weight both the prices paid in 1910–14 and current

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prices, in order to obtain the necessary ratios or indexes of prices paid. The tax and interest data are calculated as rates per acre and converted into index form.

To obtain the final "index of prices paid, interest and taxes," the index of prices paid for commodities used in living is given a weight of nearly one-half, and the indexes of commodities used in production and interest and taxes per acre are likewise given a weight of about one-half.

Selecting a month at random, say, January 1942, the foregoing procedure gives an over-all index of 146 for mid-January 1942, which means that farm-commodity prices then would have needed to be 146 percent of the base prices to have had the same purchasing power as in 1909–14.

(3) The third step in calculating parity prices is to adjust the base-period prices by the index of prices paid, interest, and taxes; in some cases adjustment is also made for seasonal variations from the base-period averages.

Following the example given above to calculate the parity prices for January 15, 1942, the base period prices are multiplied by 1.46. Thus the parity price for cotton in that month was 1.46 times 12.4 cents or 18.10 cents a pound; the parity price for wheat was 1.46 times 88.4 or 129 cents a bushel; similarly for corn 1.46 times 64.2 or 93.7 cents a bushel.

Parity prices, of course, change as the index of prices paid, interest, and taxes change—that is, parity is a relative rather than a fixed price concept.

For several commodities, chiefly fruits and vegetables which have only recently come into general use or for which earlier data are not available, the base period specified in the law [1] is August 1919–July 1929. Parity for these commodities, as well as for tobacco, is calculated in the same way as for others, except that allowances for interest and taxes are not included in the index used and, of course, the different base period is used.

In the case of potatoes, for example, for the month of January 1942, the average base price in the postwar period cited was 113.8 cents per bushel; the index of prices paid by farmers for that period was 91. Hence, 113.8 times .91 gives 103.6 cents per bushel as the parity price of potatoes in mid-January 1942.

Anyone wishing to get the up-to-date figure on parity prices can readily obtain them from the Department of Agriculture. Tables showing such prices for all the principal farm products are published each month in the Midmonth Local Market Price Report.

## Parity Principle and the War

Prices of raw materials and farm commodities rose faster and maintained some advantage over other prices throughout the last war period. With the fall of the general price level after the war, farm prices fell faster and farther than other prices and remained at a disadvantage over a relatively long period. This is

[1] "* * * The base period in the case of all agricultural commodities except tobacco and potatoes shall be the pre-war period, August 1909–July 1914. In the case of tobacco and potatoes, the base period shall be the post-war period, August 1919–July 1929" 7 U. S. C. Supp. V, Sec. 602 (1).

the usual pattern of price behavior during and following a great war.

The situation so far during this war with respect to certain farm commodities is shown in the charts that follow. Farm prices have risen relatively fast from the rather low level prevailing in the summer of 1939 and, as a whole, reached parity in the fall of 1941 for the first time since the spring of 1920.

These charts recall the disparity between farm prices and prices paid by farmers, which prevailed after the other World War, and show the recent rise to the parity level. This background should be helpful when the present problem is being studied. Parity prices are interwoven with the agricultural-loan and price-support programs and with any activities affecting agricultural commodities which may be undertaken under the Emergency Price Control Act of 1942. After the war, farmers may possibly find themselves facing some of the same problems they faced after the last World War.

### TYPICAL EXAMPLES OF PARITY PRICES FOR GIVEN MONTHS

*United States parity prices for farm products and actual prices received, excluding Government payments, expressed as percentage of parity*

| Commodity | Base period Aug. 1909–July 1914 | Parity price | | | Actual prices as a percentage of parity [1] | | |
|---|---|---|---|---|---|---|---|
| | | Jan. 15, 1941 | Dec. 15, 1941 | Jan. 15, 1942 | Jan. 15, 1941 | Dec. 15, 1941 | Jan. 15, 1942 |
| | | | | | *Percent* | *Percent* | *Percent* |
| Wheat, per bushel_____cents__ | 88.4 | 113.2 | 127.3 | 129.1 | 64 | 80 | 82 |
| Corn, per bushel_____do____ | 64.2 | 82.2 | 92.4 | 93.7 | 68 | 72 | 78 |
| Oats, per bushel_____do____ | 39.9 | 51.1 | 57.5 | 58.3 | 65 | 79 | 86 |
| Barley, per bushel_____do____ | 61.9 | 79.2 | 89.1 | 90.4 | 54 | 63 | 67 |
| Rye, per bushel_____do____ | 72.0 | 92.2 | 103.7 | 105.1 | 47 | 56 | 62 |
| Flaxseed, per bushel_____dollars__ | 1.69 | 2.16 | 2.43 | 2.47 | 71 | 73 | 79 |
| Rice, per bushel_____cents__ | 81.3 | 104.1 | 117.1 | 118.7 | 84 | 123 | 133 |
| Hops, per pound [2]_____do____ | 23.2 | 29.7 | 33.4 | 33.9 | 84 | 117 | 109 |
| Cotton, per pound_____do____ | 12.4 | 15.87 | 17.86 | 18.10 | 60 | 91 | 94 |
| Cottonseed, per ton_____dollars__ | 22.55 | 28.86 | 32.47 | 32.92 | 85 | 138 | 131 |
| Potatoes, per bushel [3]_____cents__ | 113.8 | 87.6 | 101.3 | 103.6 | 62 | 82 | 94 |
| Sweetpotatoes, per bushel_____do____ | 87.8 | 112.4 | 126.4 | 128.2 | 78 | 69 | 73 |
| Peanuts, per pound_____do____ | 4.8 | 6.1 | 6.9 | 7.0 | 53 | 69 | 73 |
| Apples, per bushel_____dollars__ | .96 | 1.23 | 1.38 | 1.40 | 73 | 79 | 83 |
| Hay, per ton_____do____ | 11.87 | 15.19 | 17.09 | 17.33 | 51 | 55 | 59 |
| Tobacco, per pound: [3] | | | | | | | |
| Flue-cured, types 11–14 [6]____cents__ | 22.9 | 22.4 | 26.1 | 26.8 | 52 | ---------- | ---------- |
| Fire-cured, types 21–24_____do____ | 13.6 | 10.5 | 12.1 | 12.4 | 92 | 122 | 110 |
| Burley, type 31 [6]_____do____ | 22.2 | 21.8 | 25.3 | 26.0 | 71 | 115 | 113 |
| Maryland, type 32_____do____ | 22.9 | 17.6 | 20.4 | 20.8 | ---------- | 123 | 115 |
| Air-cured, dark, types 35–37__ do____ | 11.2 | 8.6 | 10.0 | 10.2 | 92 | 114 | 126 |
| Cigar leaf, types 41–45_____do____ | 14.1 | 10.9 | 12.5 | 12.8 | 73 | ---------- | 89 |
| Cigar binder, types 51–55____do____ | 19.9 | 15.3 | 17.7 | 12.4 | 92 | 124 | 80 |
| Butterfat, per pound [4]_____do____ | 26.3 | 35.6 | 41.4 | 40.5 | 87 | 87 | 90 |
| Milk equivalent per 100 pounds. [5] | | | | | | | |
| dollars__ | 1.31 | 1.68 | 1.89 | 1.91 | 95 | 106 | 105 |
| Chickens, per pound_____cents__ | 11.4 | 14.6 | 16.4 | 16.6 | 94 | 96 | 102 |
| Turkeys, per pound_____do____ | 14.4 | 18.4 | 20.7 | 21.0 | 84 | 101 | 98 |
| Eggs, per dozen.[4]_____do____ | 21.5 | 26.4 | 38.4 | 29.8 | 75 | 89 | 105 |
| Hogs, per 100 pounds_____dollars__ | 7.22 | 9.24 | 10.40 | 10.54 | 79 | 98 | 100 |
| Beef cattle, per 100 pounds_____do____ | 5.21 | 6.67 | 7.50 | 7.61 | 126 | 125 | 128 |
| Veal calves, per 100 pounds_____do____ | 6.75 | 8.64 | .72 | 9.86 | 112 | 115 | 123 |
| Lambs, per 100 pounds_____do____ | 5.87 | 7.51 | 8.45 | 8.57 | 111 | 117 | 120 |
| Wool, per pound_____cents__ | 18.3 | 23.4 | 26.4 | 26.7 | 134 | 141 | 139 |

| | Comparable prices | | | Prices received as a percentage of comparable price | | |
|---|---|---|---|---|---|---|
| Peanuts for oil, per pound: | | | | | | |
| Virginia type_____cents__ | 2.0 | 2.56 | 2.88 | 2.92 | ---------- | 122 | 118 |
| Spanish_____do____ | 2.4 | 3.05 | 3.46 | 3.50 | ---------- | 138 | 118 |
| Runners_____do____ | 2.3 | 2.94 | 3.31 | 3.36 | ---------- | 124 | 121 |
| Soybeans, per bushel_____dollars | .95 | 1.22 | 1.37 | 1.39 | 94 | 107 | 119 |

[1] Does not include agricultural conservation, parity adjustment, or conditional payments.
[2] Open market price exclusive of contract sales.
[3] Base prices are averages for the crop years 1919–28. Taxes and interest not considered in determination of parity prices of commodities when using post-war base. [4] Adjusted for seasonal variation.
[5] Weighted average price of milk, wholesale, and milk-equivalent price of butter and butterfat.
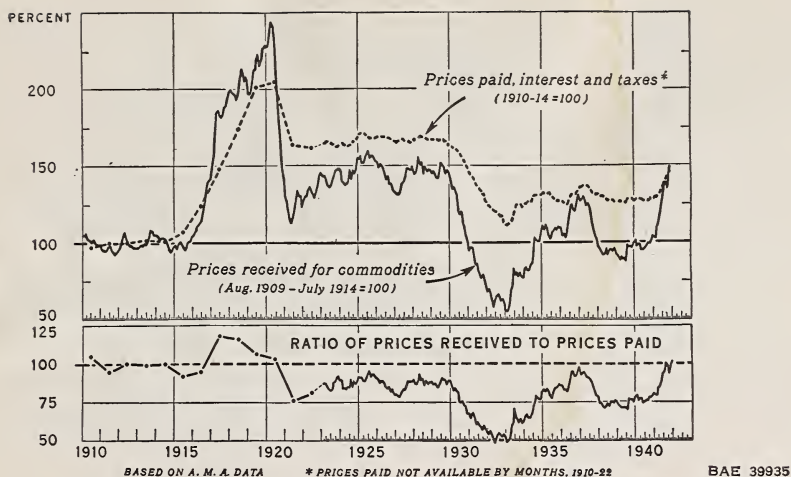[6] Base prices are averages for the crop years 1934–38.

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FIGURE 1.—Relationship between prices received and those paid by farmers since before the first World War.

Farm products stood at some advantage from 1917 to the spring of 1920; but after the collapse of prices early in 1920 farm products as a whole were at a marked disparity for 20 years. They rose as a result of the severe drought in the years 1934 and 1936, but at the time of that rise farmers had much less than usual to sell. In the autumn of 1941 farm prices as a whole reached parity for the first time since 1920.
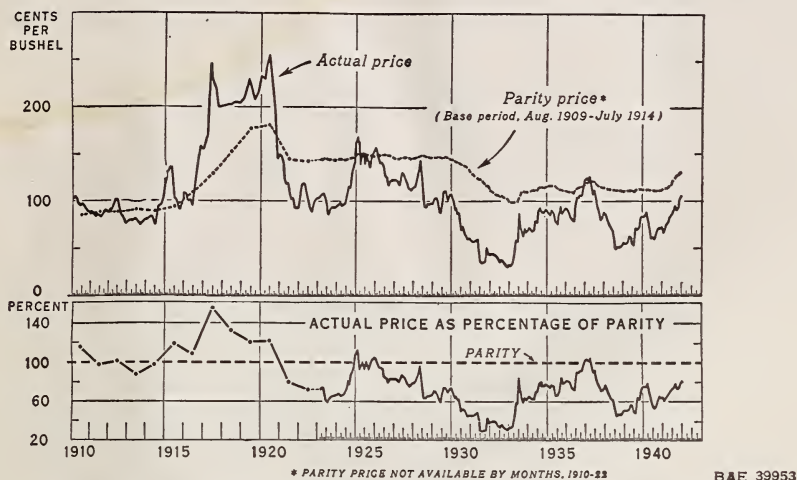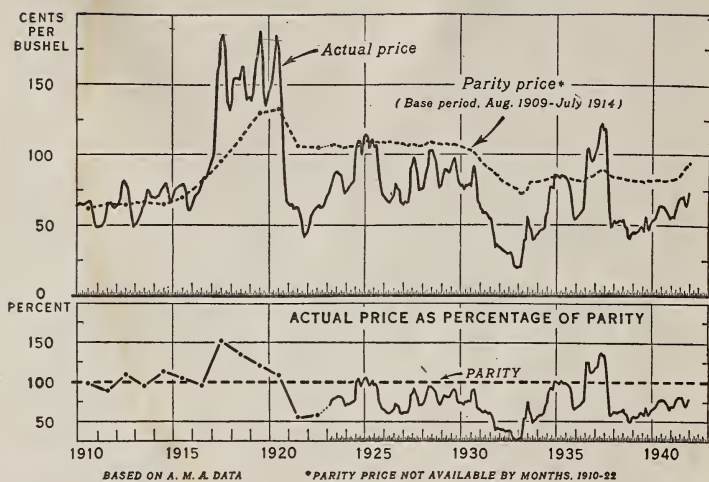


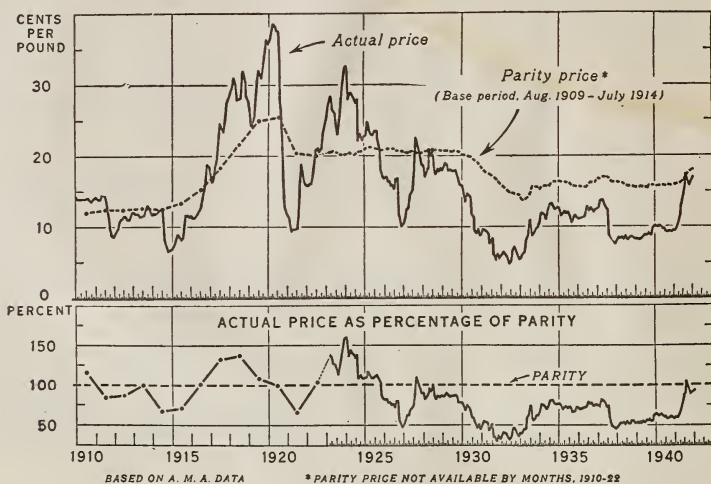FIGURE 2.—Wheat: Price received by farmers and parity price, United States, 1910–42.

The average farm price of wheat for the pre-war period August 1909–July 1914 was 88.4 cents per bushel. Wheat prices rose to relatively high levels during the first World War but since 1920 they have been below parity most of the time, with a brief exception following the short-crop years 1933–36. At the beginning of 1942 (mid-January) the average farm price of wheat was $1.06 a bushel. Parity price then would have been $1.29. In other words, wheat then was selling for only 82 percent of parity.

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FIGURE 3.—Corn: Price received by farmers and parity price, United States, 1910–42.
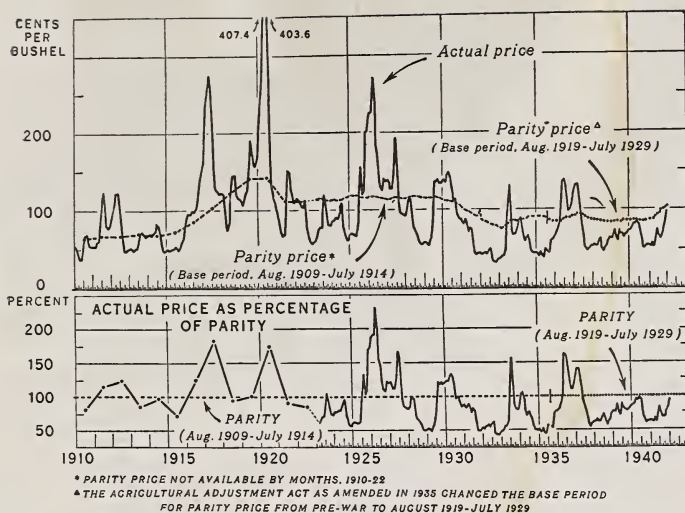
The average farm price of corn was 64.2 cents a bushel in the 5 base years August 1909–July 1914. Corn prices have been below parity most of the time since 1920 except as a result of 3 short-crop years. In January 1942 the average farm price of corn was 72.7 cents, or not quite 78 percent of parity. The parity price then would have been 93.7 cents a bushel.



FIGURE 4.—Cotton: Price received by farmers and parity price, United States, 1910–42.
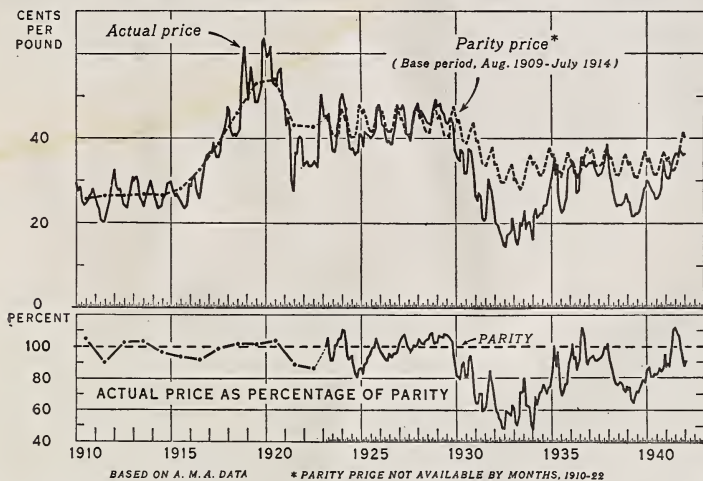
The average farm price of cotton for the base period August 1909–July 1914 was 12.4 cents a pound. Cotton prices fluctuated widely until the end of the 1920's, following which they were below parity until the late summer of 1941. In January 1942 the average farm price of cotton was 16.93 cents a pound, which was 93.5 percent of parity. The parity price then would have been 18.10 cents a pound.

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CENTS PER BUSHEL

407.4 403.6

Actual price

Parity price ▲
( Base period, Aug. 1919-July 1929 )

Parity price *
( Base period, Aug. 1909-July 1914 )

PERCENT
ACTUAL PRICE AS PERCENTAGE OF PARITY

PARITY
( Aug. 1919-July 1929 )

PARITY
( Aug. 1909-July 1914 )

* PARITY PRICE NOT AVAILABLE BY MONTHS, 1910-22
▲ THE AGRICULTURAL ADJUSTMENT ACT AS AMENDED IN 1935 CHANGED THE BASE PERIOD
FOR PARITY PRICE FROM PRE-WAR TO AUGUST 1919-JULY 1929

BAE 39951

FIGURE 5.—Potatoes: Price received by farmers and parity price, United States,1910–42.

The average farm price of potatoes in the base period August 1909–July 1914 was 69.7. But in 1935 a new base was established, August 1919–July 1929, and the average farm price during this latter base period was 113.8 cents a bushel. In January 1942 the average price was 97.6 cents a bushel, which was about 6 cents below parity.



CENTS PER POUND

Actual price

Parity price *
( Base period, Aug. 1909-July 1914 )

PERCENT

PARITY

ACTUAL PRICE AS PERCENTAGE OF PARITY

BASED ON A. M. A. DATA        * PARITY PRICE NOT AVAILABLE BY MONTHS, 1910-22

BAE 39939

FIGURE 6.—Butterfat: Price received by farmers and parity price, United States, 1910–42.

The average farm price of butterfat for the base period August 1909–July 1914 was 26.3 cents a pound. The butterfat price was below parity from 1929 to 1941 except as it was pushed up by the droughts in 1934 and 1936, which resulted in feed shortage and curtailed production. In January 1942 the average price of butterfat was 36.3 cents a pound. Parity price then was 40.5 cents a pound. At that time butterfat stood thus at 90 percent of parity.
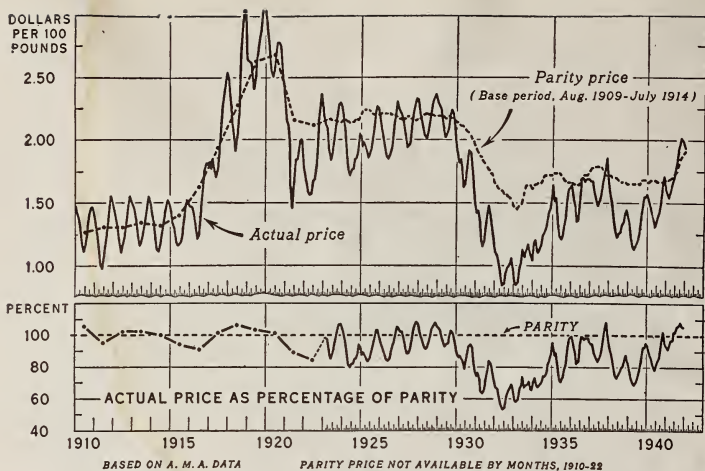
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**FIGURE 7.**—Milk equivalent: Price received by farmers and parity price, United States, 1910–42.

This chart shows the weighted average price of milk at wholesale and the milk-equivalent price of butter and butterfat. The August 1909–July 1914 base average price of milk equivalent was $1.31 per hundred pounds. The price of milk fluctuated seasonally but averaged below parity most of the time from 1920 to 1929, after which year it went still further below parity until forced upward by the short production of the drought years 1934–36. The January 1942 milk equivalent price was $2.01 per hundred pounds, which exceeded the parity price by 10 cents (weighted average price of milk, wholesale, and milk equivalent price of butter and butterfat).
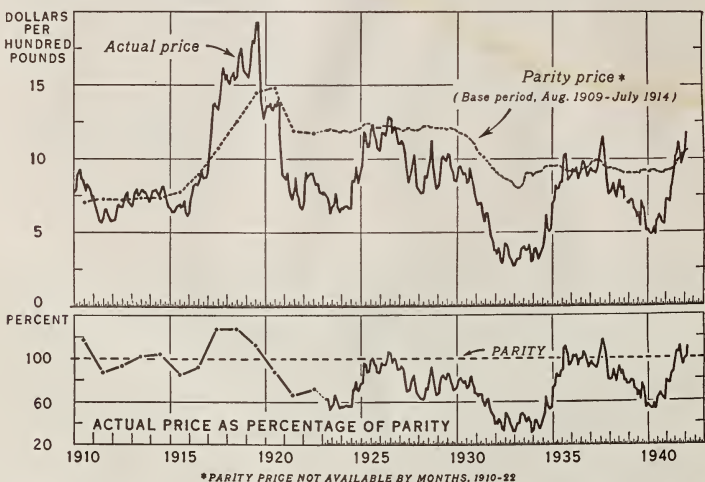


**FIGURE 8.**—Hogs: Price received by farmers and parity price, United States, 1910–42.

The average price received by farmers for hogs during the base period August 1909–July 1914 was $7.22 per hundred pounds. Following the collapse of prices in 1919, there were two brief periods between that time and 1941 when hog prices rose up to or above parity, and these periods were the result of short corn years and consequent small pig crops. In the early months of 1942 hog prices moved up somewhat above the parity level.

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